# Bruneau River-Sheep Creek Wilderness Study Area

# 1. The Study Area -- 104,406 acres

The Bruneau River-Sheep Creek WSA (ID-111-17) is located in Owyhee County 90 miles southeast of Boise, Idaho. The WSA includes 104,406 acres of BLM lands and six state inholdings totaling 3,840 acres (see Table 1).

The WSA, on both sides of the Bruneau River and Sheep Creek, is bounded mostly by primitive dirt roads and crested wheatgrass seedings. One cherry-stem road totaling 2.75 miles enters the southwestern portion of the area.

The WSA consists of a plateau dissected by over 85 miles of river canyons. The Bruneau River and its major tributaries have carved narrow, meandering courses through rhyolite rock to produce a canyon system 200 to 1,000 feet deep typified by vertical rock walls with thousands of rock spires. In most places, small talus slopes are nestled between rock walls and the river. Above the rhyolite chasms, there are often additional talus slopes topped with an upper rim of basalt. The slopes of the canyons are covered with big sagebrush species and bunchgrasses. Along the water courses, lush riparian areas are lined with western juniper and dense growths of rushes, sedges, poison ivy and grasses. The canyons are some of the most spectacular in the nation. The canyons attract boaters and backpackers who are seeking physical challenge and isolation.

The plateaus are flat with infrequent low knolls providing the only topographic relief. Vegetative cover consists principally of big sagebrush-Sandberg bluegrass sites and shadscale-Indian ricegrass sites. Some areas have burned and are dominated by cheatgrass, an invading non-native species.

The WSA was studied under Section 603 of the Federal Land Policy and Management Act (FLPMA) and was included in the Jarbidge Resource Management Plan and Environmental Impact Statement filed in October 1987 at which time the recommendation for wilderness was generated through the planning process. Four alternatives were analyzed in the Jarbidge Wilderness EIS: a partial wilderness alternative where 20,800 acres of BLM land would be designated as wilderness and 83,606 acres would be released for nonwilderness uses, which is the recommendation of this report; an all wilderness alternative; a no wilderness alternative where 104,406 acres would be released for nonwilderness uses; and a no wilderness alternative where 24,000 acres of BLM land would be included within the National Wild and Scenic Rivers System.

## 2. Recommendation and Rationale

20,800 acres recommended for wilderness

83,606 acres recommended for nonwilderness

The recommendation for the Bruneau River-Sheep Creek WSA is to designate 20,800 acres (the canyons) as wilderness and to release 83,606 acres (the plateaus) for other uses. The environmentally preferable alternative is the all wilderness alternative. It would cause the least change from the natural environment over the long term. The recommendation would use all practical means to avoid or minimize adverse environmental impacts.

The 20,800 acres of federal land recommended for wilderness designation are shown as the nonshaded area on the Bruneau River-Sheep Creek Proposal map. This recommendation would further apply to any state inholding acreage and 85 acres of private land adjacent to the WSA if acquired through purchase or exchange with willing owners. Appendix I lists all nonfederal lands within the areas recommended for wilderness and provides additional information on acquisition on these lands.

The 20,800 acres recommended for wilderness designation would enhance the National Wilderness Preservation System through the addition of about 85 miles of scenic canyons within 1.5 to three hours driving time from Boise, Idaho. The canyons offer outstanding opportunities for primitive recreation and solitude within a pristine setting. The canyons have educational and scientific importance due to the presence of numerous prehistoric cultural sites and sensitive plant and animal species. Although designation of the canyons would not add a new ecosystem to the wilderness system, it would add a landform (desert canyon) not presently represented within the Sagebrush Steppe Ecosystem.

The canyons are recommended for wilderness because conflicts with other resources due to wilderness designation are minimal. Little livestock use occurs because of the inaccessibility of the canyons and the area recommended for wilderness designation has low potential for the development of mineral resources. The canyons are manageable as wilderness due to their extreme ruggedness and their inaccessibility to motor vehicles and because of the well-defined wilderness boundary provided by the uppermost canyon rims. Wilderness designation of the rim-to-rim portions of about 85 miles of canyon (20,800 acres) would provide long-term protection to an exceptionally scenic area with outstanding wilderness characteristics.

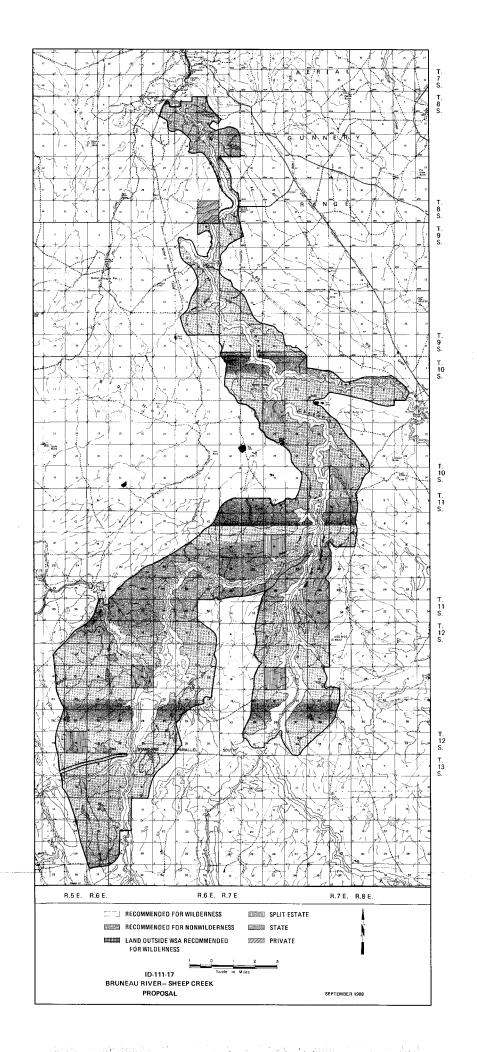
The plateau areas (83,606 acres) are not recommended for wilderness designation because of conflicts with other resource uses. In comparison with the canyons and other plateau areas recommended for wilderness, the plateaus of the WSA are less natural and scenic and have lower opportunities for solitude due to frequent overflights by military jets. The vegetation on the WSA's plateaus is in poor ecological condition.

A nonwilderness recommendation would alleviate conflicts with grazing and range management, such as seeding, fencing and livestock water development projects, with the need for vegetative manipulation projects on 8,500 acres to improve California bighorn sheep habitat and with the use of the plateaus for recreation activities dependent on motor vehicles, such as hunting and rock collecting.

With wilderness designation of plateau, options to suppress the numerous lightning-caused wildfires and to reseed burned areas would be severely limited. In the long term, it is anticipated that all remnant areas of native vegetation on the plateaus would be burned off by wildfires. To prevent the invasion of cheatgrass, a non-native annual grass species, burned areas have to be reseeded using motorized equipment and non-native, drought-tolerant perennial grass species suitable for wildlife and livestock forage. If cheatgrass were allowed to invade burned areas, cheatgrass stands would cause increased fire problems and consequently soil stability problems.

If the plateaus were designated as wilderness, it would be difficult to prevent the use of motor vehicles over the 29 miles of way and cross-country due to the lack of topographic barriers. The ways have been traditionally used for hunting, for access to the canyons for rock collecting and fishing and for day-to-day livestock management. A nonwilderness designation of the plateaus would eliminate the need for fencing and increased managerial presence to prevent unauthorized motorized use within a wilderness.

Within other WSAs in southwestern Idaho, such as those in the Jacks Creek and Owyhee Canyonlands area, large plateau areas with higher wilderness and ecological values have been recommended for wilderness designation.



# Table 1 -- Land Status and Acreage Summary of the Study Area BRUNEAU RIVER-SHEEP CREEK WSA

## Within Wilderness Study Area

BLM (surface and subsurface) Split Estate (BLM surface only)	10	4,406
Inholdings (state, private)		3,840
Total		8,246

# Within the Recommended Wilderness Boundary

BLM (within WSA) BLM (outside WSA) Split Estate (within WSA) Split Estate (outside WSA)	20,800 0 0 0
Total BLM Land Recommended for Wilderness	20,800
Inholdings (state, private) <sup>1</sup>	1,165
State land (outside WSA)	,

# Within the Area Not Recommended for Wilderness

BLM Split Estate	8	3,606
•		U,
Total BLM Land Not		
Recommended for Wilderness		3,606
Inholdings (state, private)		2.760

<sup>&</sup>lt;sup>1</sup>Appendix I is a detailed description of inholdings included within the area recommended for designation.

# 3. Criteria Considered in Developing the Wilderness Recommendations

### Wilderness Characteristics

### A. Naturalness

The Bruneau-Sheep Creek WSA consists of a plateau dissected by deep, meandering river canyons. The WSA generally appears natural but there are several site-specific signs of man that impact naturalness locally including mining disturbances adjacent to the Bruneau River along the southern boundary of the WSA and one mile of constructed livestock trail into the Sheep Creek canyon. On the plateau, 29 miles of ways, 11 miles of fence, 19 livestock water reservoirs and one mile of constructed livestock trail are within the WSA. One cherry-stem road (2.75 miles) enters the southwestern plateau area of the WSA.

#### B. Solitude

The Bruneau River-Sheep Creek WSA contains outstanding opportunities for solitude. More than 85 miles of canyons provide excellent topographic and vegetative screening between visitor groups and excellent potential for dispersed recreational use. The large size of the plateau, the screening potential of low vegetation, the topography's potential to disperse visitor groups and the good access to much of the WSA boundary would assure that groups could visit plateau areas without a disruption of their sense of solitude. Solitude is frequently disrupted by low-flying military aircraft utilizing the U.S. Air Force bombing range just east of the WSA. Due to the lack of topographic screening, sights and sounds of military aircraft are more noticeable from the plateau area.

#### C. Primitive and Unconfined Recreation

The WSA contains outstanding opportunities for a primitive and unconfined type of recreation. The natural features of the Bruneau River-Sheep Creek WSA, especially the canyons, provide a strong recreational attraction to people interested in backpacking, day hiking, sightseeing, photography, wildlife viewing, hunting, fishing, rockhounding and whitewater boating. The Bruneau River is nationally known for its excellent whitewater boating while the canyons are some of the most spectacular in the nation. The canyons attract recreationists seeking physical challenge and isolation. The plateau provides opportunities for primitive and unconfined recreation without the physical demand associated with the canyons; however, opportunities are of a lower quality than the canyons due to the lack of strong recreational attractions on the plateau.

### D. Special Features

The WSA contains habitats for and populations of California bighorn sheep, bobcat, river otter and redband trout, all classified as sensitive species. Sensitive plant species found include *Lepidium davisii* and *Leptodactylon glabrum*.

The Bruneau River and Sheep Creek have been recommended to Congress for inclusion within the National Wild and Scenic Rivers System as wild rivers.

The area has educational and scientific importance due to the numerous prehistoric cultural resources within the WSA, many of which have been evaluated as significant sites eligible for nomination to the National Register of Historic Places. These may demonstrate a type of habitation and subsistence activity not previously described in the scientific literature for the Northern Great Basin Culture area. A majority of the cultural sites are located in the canyons.

# Diversity in the National Wilderness Preservation System

# A. Assessing the Diversity of Natural Systems and Features as Represented by Ecosystems

Wilderness designation of the Bruneau-Sheep Creek WSA would not add a new ecosystem to the National Wilderness Preservation System (NWPS); however, it would add a vegetation and landform not presently represented in the Sagebrush Steppe Ecosystem. This ecosystem is represented by three designated areas with 76,699 acres. There are 35 other BLM study areas in the state under study with this ecosystem. This information is summarized on Table 2. The vegetation on the plateaus of the WSA is in poor condition while the vegetation in the canyons is in good condition.

TABLE 2

Ecosystem Representation

Bailey-Kuchler	NWPS	S Areas	Other BLM	Other BLM Studies	
Classification	areas	acres	areas	acres	
Dry Domain/Intermountain Sagebrush Province					
		<u>NATIOI</u>	<u>NWIDE</u>		
Sagebrush Steppe Ecosystem	3	76,699	136	4,359,340	
		IDA	HO		
Sagebrush Steppe Ecosystem	1	12,007	<b>35</b>	949,916	
Journal of the Control of the Contro		<u>NE'</u>	VADA		
Sagebrush Steppe Ecosystem	1	32,407	29	1,273,919	
		CALIFO	<u>DRNIA</u>		
Sagebrush Steppe Ecosystem	0	0	5	152,431	
		<u>OR</u>	<u>EGON</u>		
Sagebrush Steppe Ecosystem	0	0	67	1,983,074	

# B. Expanding the Opportunities for Solitude or Primitive Recreation Within a Day's Driving Time (Five Hours) of Major Population Centers

The Bruneau River-Sheep Creek WSA is within a five-hour drive of Boise, Idaho. Table 3 summarizes the number and acreage of designated areas and other BLM study areas within a five-hour drive of the population center.

Table 3

# Wilderness Opportunities for Residents of Major Population Centers

	<u>NWPS</u>	Areas	Other BLM Studies	
Population Centers	areas	acres	areas	acres
Poice Idobe	16	4 741 570	4.4.4	F 074 050
Boise, Idaho	16	4,741,570	141	5,374,250

## C. Balancing the Geographic Distribution of Wilderness Areas

The Bruneau River-Sheep Creek WSA would not add significantly to balancing the geographic distribution of areas within the NWPS. Regionally, the WSA would add a desert canyon system not found in designated wilderness and would help balance opportunities to attain diverse wilderness experiences.

### Manageability

The portion of the WSA recommended for wilderness, the canyons, is extremely manageable as wilderness due to its ruggedness and lack of conflicts with other resource uses. The only concern in this area relates to the existence of unpatented mining claims for Bruneau jasper and fire opal at Indian Hot Sprints in the extreme southeastern portion of the WSA. There are numerous mining claims at Indian Hot Springs, all or portions of eight claims totaling about 100 acres, within the WSA. If these claims are determined to be valid, the removal of jasper would cause a localized loss of wilderness values.

The portion of the WSA recommended for nonwilderness, the plateau, is less manageable as wilderness due to the need for the suppression of numerous lightning-caused wildfires and the need to reseed burned areas to prevent the spread of cheatgrass, an annual grass species introduced from Russia. To prevent the invasion of a thick monoculture of cheatgrass, burned areas must be reseeded using drought-tolerant perennial grasses and motorized equipment. Crested wheatgrass, an introduced species, has proven to be the most reliable perennial grass in effectively suppressing the cheatgrass and in allowing shrubs to reestablish. If cheatgrass is allowed to invade burned areas, cheatgrass stands would cause increased problems in controlling wildfires and, consequently, soil stability problems. Due to the lack of topographic and vegetative barriers, it would also be extremely difficult to prevent unauthorized motor vehicle use on the plateaus.

### **Energy and Minerals Resource Values**

The U.S. Geological Survey (USGS) and Bureau of Mines (BM) completed a mineral assessment for 90,000 acres of the Bruneau River-Sheep Creek WSA in 1988. The assessment found that the WSA has a low mineral resource potential for metals. A small amount of placer gold found was derived from gold mining districts upstream from the WSA. The gold values are too low and the placers are much too small and inaccessible to support commercial mining at a gold price of \$425 an ounce. The deposits could be attractive for recreational panning, sluicing and suction dredging.

At the southern boundary of the WSA near Indian Hot Springs on the Bruneau River, there is moderate potential for gem-quality Bruneau jasper. There are eight active mining claims for the sole source of this material between the Bruneau River-Sheep Creek and Jarbidge River WSAs. Bruneau jasper is well known to dealers and is in moderate demand. In 1985, wholesale prices of good quality material ranged from \$8 a pound to \$20 a pound.

Near the northern end of the WSA, recreational collecting of agate and petrified wood occurs. In the same area, but outside of the WSA near Hot Creek, there is limestone that could be mined if demand for limestone increases or if a new market is developed locally.

Geothermal resources are found at the northern and southern ends of the WSA near Indian Bathtub and at Indian Hot Springs. The low-to-moderate temperature systems are suitable for direct-use application but not for power generation.

Since extensive high-angle faulting has likely precluded any accumulation of oil and gas, the WSA has a low energy resource potential.

In 1989, a 60-day public review of the USGS/BM mineral survey report for the Bruneau River-Sheep Creek WSA was conducted. During the review, comments were submitted which resulted in follow-up consideration by the USGS. Based on this reevaluation, the USGS upgraded the mineral potential rating from low to moderate for undiscovered resources of low-grade, epithermal hot-spring gold and silver deposits in the WSA.

### Impacts on Resources

The following comparative impact table summarizes the effects on pertinent resources for all the alternatives considered including designation or nondesignation of the entire area as wilderness.

Table 4
Comparative Summary of the Impacts by Alternative
WSA ID-111-17 (BRUNEAU RIVER-SHEEP CREEK)

ISSUE TOPICS	PROPOSED ACTION (PARTIAL WILDER- NESS ALTERNATIVE)	NO WILDERNESS ALTERNATIVE	NO WILDERNESS (WILD RIVER) ALTERNATIVE	ALL WILDERNESS ALTERNATIVE
Impacts on Wilderness Values Including Special Features	The canyons, 20,800 acres (20% of the WSA), designated as wilderness would receive long-term Congressional protection. With the exception of a localized loss of naturalness and outstanding opportunities for solitude and primitive recreation occurring on 100 acres of contiguous mining claims from mining activities, all wilderness values in the portions of the WSA which contain the most spectacular scenery and outstanding opportunities for primitive recreation and solitude would be maintained or enhanced. On the 83,606 acres of plateau not designated as wilderness, there would be long-term losses of naturalness on 14,500 acres (15% of WSA) from seedings.	With the exception of localized losses to naturalness and outstanding opportunities for solitude and primitive recreation occurring on 100 acres of mining claims and on other limited sites of mineral exploration work, all wilderness values within the canyon would be retained or enhanced. On the plateaus, long-term losses of naturalness on 15,400 acres would occur (15% of WSA) from seedings.	All wilderness values in 24,000 acres of the WSA (23% of the WSA) that contain the most spectacular scenery and outstanding opportunities for primitive recreation and solitude would receive long-term Congressional protection as a wild river. With the exception of localized loss of naturalness and outstanding opportunities for solitude and primitive recreation occurring on 100 acres of contiguous mining claims from mining activities, all wilderness values would be maintained or enhanced in the canyons. On the plateaus, long-term losses of naturalness of 15,400 acres would occur (15% of WSA) from seedings.	All wilderness values would receive long-term Congressional protection. With the exception of a localized loss of naturalness and outstanding opportunities for solitude and primitive recreation occurring on 100 acres of contiguous mining claims from mining activities, all wilderness values in the canyons and plateaus would be maintained or enhanced.
Impacts on Range Management Project Maintenance and Construction	There would be no impact on range project maintenance and construction. A 722 AUM (18%) increase in livestock use would occur. Proposed projects include 3.5 miles of pipeline and 1.7 miles of fence.	There would be no impact on range maintenance and construction. A 722 AUM (18%) increase in livestock use would occur. Proposed projects include 3.5 miles of pipeline and 1.7 miles of fence.	There would be no impact on range project maintenance and construction. A 722 AUM (18%) increase in livestock use would occur. Proposed projects include 3.5 miles of pipeline and 1.7 miles of fence.	The cost in terms of time and inconvenience of constructing new fences and of maintaining post FLPMA (October 21, 1986) projects would approximately double. A 722 AUM increase in livestock use would be foregone. Proposed projects include 3.5 miles of pipeline and 1.7 miles of fence.
Impacts on Development of Mineral Resources (continued next page)	Potential mineral resources on 83,606 acres would be available for development. Exclusive of the Bruneau jasper claims, the WSA has	Potential mineral resources would be available for development. Exclusive of the Bruneau jasper claims, the WSA has low	Potential mineral resources would be available for development on 80,406 acres. Exclusive of the Bruneau jasper	With the exception of valid existing rights, potential mineral resources would not be available for development. The

ISSUE TOPICS	PROPOSED ACTION (PARTIAL WILDER- NESS ALTERNATIVE)	NO WILDERNESS ALTERNATIVE	NO WILDERNESS (WILD RIVER) ALTERNATIVE	ALL WILDERNESS ALTERNATIVE
Impacts on Development of Mineral Resources (continued)(Bruneau River-Sheep Creek WSA)	low potential for development of mineral resources. Impacts of withdrawal of 20,800 acres from mineral entry and mineral leasing would be insignificant since no development is projected.	potential for develop- ment of mineral re- sources. There would be no impact on mineral resource development.	claims, the WSA has low potential for development of mineral resources. Impacts of withdrawal of 24,000 acres from mineral leasing would be insignificant since no development is projected.	potential for the development of any additional mineral resources is low. Impacts of withdrawal of 104,406 acres from mineral entry and mineral leasing would be insignificant since no development is projected.
Impacts on Recreational Motor Vehicle Use	Impacts to recreational motor vehicle use would be minimal. On the portion of the WSA accessible by motor vehicles, 68,606 acres (66% of WSA) would remain open to ORV use, and on 15,000 acres (14% of WSA), motor vehicle use would be allowed only on designated routes with minimal impact. Closing 20,800 acres (20% of WSA) in the inaccessible canyon would have no impact.	Impacts to recreational motor vehicle use would be minimal. On the portion of the WSA accessible by motor vehicles, 68,606 acres (66% of WSA) would remain open to ORV use and, on 15,000 acres (14% of WSA), motor vehicle use would be allowed only on designated routes with minimal impact. Limiting use on 20,800 acres (20% of WSA) inaccessible canyon would have no impact.	Impacts to recreational motor vehicle use would be minimal. On the portion of the WSA accessible by motor vehicles, 67,406 acres (65% of WSA) would remain open to ORV use and, on 13,000 acres (12% of WSA), motor vehicle use would be allowed only on designated routes with minimal impact. Limiting use on 24,000 acres (23% of WSA) inaccessible canyon would have no impact.	The entire area would be closed to motor vehicle use. 100 visitor days would be foregone annually. The impacts of shifting use to adjacent public land would be negligible.

### Local Social and Economic Considerations

Designation of 20,800 acres of the Bruneau River-Sheep Creek WSA as wilderness would have no impact on local social and economic values. There were no social or economic issues identified with the study of this WSA.

## **Summary of WSA-Specific Public Comments**

Public involvement has occurred throughout the wilderness review process. Certain comments received during the inventory process were considered in developing study issues and various management alternatives. During the inventory phase, 38 comments were received. Of the 31 comments supporting WSA designation, 12 specifically recommended wilderness designation. Seven comments stated the area should not be designated a WSA to allow continuing multiple-use management. The Idaho Department of Lands recommended that state land inholdings be exchanged should the area be designated as wilderness to avoid management conflicts.

During formal public review of the Draft Jarbidge Resource Management Plan and Environmental Impact Statement, 94 comments addressed wilderness suitability of the Bruneau River-Sheep Creek WSA. Of those, 65 comments supported wilderness designation and 29 opposed wilderness designation. One of the opposing comments was a petition signed by 48 individuals.

Those favoring wilderness cited that designation is needed to protect the wilderness values and the special features of both the canyons and plateaus. Most wilderness supporters wanted wilderness designation of the entire WSA.

Those opposing designation were concerned that wilderness would place restrictions on livestock management, remove the area from mineral exploration and development and prevent recreational motor vehicle use. About one-half of the comments opposing wilderness designation supported national wild river designation.

Three government agencies commented specifically on this WSA. The Idaho Department of Fish and Game stated that inclusion of some plateau lands of the Bruneau River-Sheep Creek WSA within wilderness is essential to protect California bighorn sheep habitat and to allow increase of bighorn populations to viable levels. The Idaho Department of Parks and Recreation supported a wilderness suitability recommendation of 17,929 acres. The Idaho Air National Guard opposed wilderness designation because of possible conflicts with its tactical flight training missions.

#### APPENDIX I -- BRUNEAU RIVER-SHEEP CREEK WSA Estimated Costs of Acquisition of Nonfederal Holdings Within Areas Recommended for Designation(1)

,			Type of Ownership by Estate	Type of Ownership by Estate			Estimated Cost of Acquisition	Estimated Cost of Acquisition
Legal Description	Total Acreage	Number of Owners	Surface Estate	Subsurface Estate	Presently Proposed for Acquisition	Preferred Method of Acquisition	Land Costs (in \$)	Processing Costs (in \$)
Parcel No. 1 T. 8 S., R. 6 E. Sec. 36	640(2)	1	Private	Private	Yes	Exchange	N/A	5,000
Parcel No. 2 T. 10 S., R. 7 E. Sec. 16	640(2)	1	State	State	Yes	Exchange	N/A	3,400
Parcel No. 3 T. 10 S., R. 7 E. Sec. 36.	640(2)	1	State	State	Yes	Exchange	N/A	3,400
Parcel No. 4 T. 11 S., R. 7 E. Sec. 16	640(2)	1	State	State	Yes	Exchange	N/A	3,400
Parcel No. 5 T. 12 S., R. 6 E. Sec. 16	640(2)	1	State	State	Yes	Exchange	N/A	3,400
Parcel No. 6 T. 12 S., R. 7 E. Sec. 16	640(2)	1	State	State	Yes	Exchange	N/A	3,400

<sup>(1)</sup>The estimated costs listed in this appendix in no way represent a formal appraised value of the land or mineral estate but are rough estimates based on sales or exchanges of lands or mineral estates with similar characteristics to those included in the WSA. The estimates are for purposes of establishing a range of potential costs to the government of acquiring nonfederal holdings and in no way represent an offer to purchase or exchange at the cost estimate included in this appendix.

<sup>(2)</sup>Only portion of this acreage is within area recommended for designation. Acquisition through exchange would necessitate acquisition of entire parcel.